IN THE DRAWING

Amended drawing 1/1 is attached.

IN THE CLAIMS

Amend the claims as shown on the attached FIRST AMENDMENT:CLAIMS MARKED UP.

REMARKS

Reexamination and reconsideration of this application as amended is requested. By this amendment: Claim 2 has been canceled; Claims 1, 3-5, 7, 9, 12, and 13, have been amended; and new claims 16 and 17 have been added. Claims 1, and 2-17 remain in the application.

The drawing was objected to. Figure 3 of the drawing has been amended to omit reference numeral "48" as requested by the examiner.

Several claims were objected to because of informalities. These objections have been overcome by making the suggested amendments to the claims.

Claims 2, 3, 5, 6, and 9-15 have been found to be allowable.

Claim 1 has been amended to include the subject matter of allowable claim 2, is seen to be in condition for allowance and allowance is requested.

Claim 2 has been cancelled.

Claim 3 was found to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and to include all of the limitations of the base claim and any intervening claims. Claim 3 has been so rewritten, and is seen to be in condition for allowance, and allowance is requested.

Claim 4 was rejected as unpatentable primarily in view of OVERALL (1,834,635) and

O'HERN (2,206,614).

After careful consideration of the above-identified Official Action and the cited references, claim 4 has been amended to more specifically define the invention. Specifically, claim 4 has been amended to include that the saw includes a "handle" that is "generally cylindrical" and "elongate" and has a "longitudinal axis". The "rotary motor" including "a drive shaft" is within the handle. The "piston rear end" is mounted in the handle. And the "motion converter means" is mounted in the handle. The shaft axis of the drive shaft is parallel to the handle axis, and the piston moves parallel to the handle axis. The claimed configuration places the significant mass of the saw within the handle and the linear movements parallel to the handle axis and thus directly acting on the mass. This configuration is very beneficial for reducing motion of handle during sawing. Reduction of rotation from motor torque and reduction of vibration are important because of the delicate nature and precision required in sawing with the thin blade. Movement from engine torque is reduced because the user's hand directly wraps around the motor and easily counters motor acceleration. Vibration is reduced because the linear movement is all directed through the mass of the handle and contained components and the mass of the user's hand and part of the user's arm. The claimed configuration is also important regarding balance in that the major components are within the handle such that there are no large side rotational forces or front/back tipping forces.

None of the cited references show the claimed device and configuration nor is it obvious therefrom. The invention of amended Claim 4 differs considerably from OVERALL in that in OVERALL none of the claimed components reside in the handle. Consequently, OVERALL requires that the user use both hands just to hold the saw. The motor protrudes to the side of the saw such that another handle 9 is provided for gripping with the user's other hand to counter the moment of the cantilevered motor. Likewise, in O'HERN none of the components reside in the main handle or secondary handle and two hands are required to use the saw. MILLER (5,044,254) teaches the importance of vibration reduction, but teaches that use of a reciprocating device which by its very nature introduces considerable vibration. MILLER does not appreciate, teach or suggest that a rotary motor and rotary-to-linear motion converter can be incorporated into the handle. The other references are not as relevant.

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In view of the amendment and remarks, Claim 4, as amended, is seen to be in condition for allowance and allowance is requested.

Claim 5 was found to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and to include all of the limitations of the base claim and any intervening claims. Claim 5 has been so rewritten, and is seen to be in condition for allowance, and allowance is requested.

Claims 6-8, reciting further patentable subject matter and being ultimately dependable upon now allowable Claim 5, are also seen to be in condition for allowance and allowance is requested.

Claims 9-15 were found to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph. Claims 9-15 have been so rewritten, and are seen to be in condition for allowance, and allowance is requested.

New independent claim 16 includes the combination of a dental arch model including: a positive die of a dental arch including: gums; and a plurality of teeth; and an arch plate connected to the die with the saw of amended claim 4 adapted for cutting individual dies from the dental arch model.

None of the references, either singly or in combination, disclose or teach the combination of Claim 16 nor is it obvious therefrom.

Therefore, in view of the above and for the reasons cited with respect to Claim 4, Claim 16 is seen to be in condition for allowance and allowance is requested.

New independent claim 17 claims the method of using the saw of claim 4 to cut individual dies from a dental arch.

None of the references, either singly or in combination, disclose or teach the method of Claim 17 nor is it obvious therefrom.
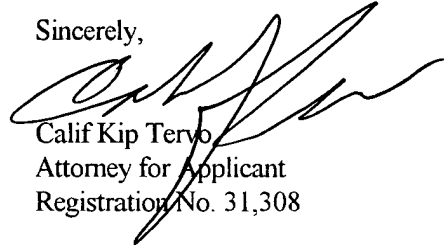
Therefore, in view of the above and for the reasons cited with respect to Claim 4, Claim 17 is

seen to be in condition for allowance and allowance is requested.

In view of the amendment and the remarks Claims 1, and 3-17 are seen to be in condition for allowance and allowance is requested.

The Examiner is requested to contact the undersigned if it will aid in the disposition of this application.

Sincerely,

Calif Kip Tervo,
Attorney for Applicant
Registration No. 31,308

Calif Kip Tervo, Esq.
6387 Caminito Lazaro
San Diego, California 92111
(619) 234-4034